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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Titus Technological Laboratories
Lawrence L. Titus
President / Owner

### COMMENTS RECARDING:

The Matter of	)	
•	)	. /
Notice of Proposed	)	
Rule Making - Selection of	)	ET Docket No. 92-298
A Single System For AM	)	
Stereo Broadcasting	)	

April 19, 1993

To the Commission,

#### I. INTRODUCTION

1. The Federal Communications Commission, by Notice of Proposed Rule Making, Docket NO. 92-298 is looking into the possibility of changing the existing "market place" selection process in favor of selecting a single "standard" technology for use in AM stereo broadcasting. As an interested party with much experience in both the implementation of AM stereo systems and equipment manufacture, I am submitting my comments on the proposed rule making.

#### II. BACKGROUND

- 2. I have been directly involved with the operation of radio stations for over twenty years. I was former Chief Engineer of WTIC (Hartford, CT), a Class 1B Clear Channel AM stereo station on 1080 kHz as well as Director of Engineering for Chase Broadcasting (Hartford, CT). As DOE for Chase I was responsible for the operation of several engineering departments for several radio stations. All of the Chase Broadcasting stations were planning to convert to AM stereo as WTIC had done.
- 3. WTIC was one of the first AM stations in the country to broadcast AM stereo. During the early 1980s careful attention was given by our engineering department as to the validity of all of the AM stereo technologies. Given our extensive experience in dealing with sky wave propagation and interference for over 60 years we decided that the only valid AM stereo technology was one that included the use of independent sideband transmission. Thus the Kahn AM stereo system was selected for use at WTIC.

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## III. WIIC EXPERIENCE

- 4. During our years of experience with the Kahn AM stereo system we found no problems with fidelity, splatter, "platform shift", or increased distortion. We did find that the interference from our first adjacent channel (WBAL, 1090 kHz, Baltimore, MD) was greatly reduced in our City of License.
- 5. We felt that by the use of independent sideband transmission we could concentrate our audio signal more in one channel than the other at night thus shifting the apparent channel center away from WBAL. The consumer receiver was tuned to the loudest audio and thus the 10 kHz intermodulation "beat note" between WTIC and WBAL was reduced in amplitude.
- 6. We also found in those receivers available to tune the Kahn AM stereo system the quality and fidelity of the stereo signal was clearly rivaling the stereo signal produced by our own FM stereo station. In our own in house unscientific testing we discovered that listeners were unable to distinguish between AM stereo and FM stereo.
- 7. As the Motorola AM stereo system (CQUAM) came into use in our part of the country we became very curious as to how that system would perform via sky wave. As we expected we found that by it's very nature of stereo generation, transmission, and reception problems with the shifting of the "stereo platform" became quickly evident from the first.
- 8. Under great protest from myself and our Engineering Department WTIC converted to CQUAM in the late 1980s. The decision was made by the

13. I strongly support, at this point many years later, that which is still a market place decision regarding AM sterco. With my direct hands on experience with both AM sterco generation systems I could not, in good conscience, support the selection of the CQUAM system as the "standard" system for the generation of AM stereo in the United States.

14. I still support any station that selects the Kahn system for AM stereo generation as still being the most viable and desirable for the listening public.

Respectfully submitted

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